

Application No. 10/673,496

Docket No. A8319.0037/P037-A

AMENDMENTS TO CLAIMS

1-3. (Canceled)

4. (Currently Amended) A tomogram creating method, comprising the following steps:

~~acquiring data for creating a first structural tomogram~~ a first radiation signal, while a body to be examined ceases breathing, with respect to radiation transmitted through the body;

~~a first structural tomogram creating step for creating data [[about]] to be used for constructing a first structural tomogram, based on [[a]] said first radiation signal detected in an unbreathed state of a body to be examined, with respect to radiation transmitted through the body;~~

~~acquiring data for creating a second structural tomogram~~ a second radiation signal, while the body to be examined is breathing, with respect to radiation transmitted through the body;

~~a second structural tomogram creating step for creating data [[about]] to be used for constructing a second structural tomogram, based on [[a]] said second radiation signal detected in a breathed state of the body with respect to radiation transmitted through the body;~~

~~a correction information creating step for creating correction information of a tomogram to be used for correcting image blurring of said second structural tomogram with respect to said first structural tomogram, based on the data to be used for constructing said first structural tomogram data and [[the]] second structural tomogram data~~ tomograms;

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~~acquiring data for creating a third structural tomogram~~ a third radiation signal, while the body to be examined is breathing, with respect to radiation emitted from the body to be examined due to a radioactive medical agent; and

a functional tomogram creating step for creating data ~~[[about]]~~ to be used for constructing a functional tomogram, based on ~~[[a]]~~ said third radiation signal ~~detected in the breathed state of the body with respect to radiation emitted from the body due to a radioactive medical agent,~~ and the correction information.

5. (Currently Amended) The tomogram creating method according to claim 4, wherein the first radiation ~~detect~~ signal and the second radiation ~~detect~~ signal are detect signals outputted from discrete radiation examining apparatuses each of which detects the radiation emitted from a radiation source and transmitted through the body.

6. (Currently Amended) The tomogram creating method according to claim 4, wherein the second radiation ~~detect~~ signal and the third radiation ~~detect~~ signal are detect signals outputted from radiation detectors of a radiation examining apparatus used in both a second examination for irradiating the body with ~~[[first]]~~ second radiation from a radiation source and detecting the same, and a third examination for detecting ~~second~~ third radiation emitted from the body due to a radioactive medical agent.

7. (Currently Amended) The tomogram creating method according to claim ~~[[6]]~~ 4, wherein the first radiation ~~detect~~ signal is a ~~detect~~ signal outputted from ~~[[the]]~~ radiation ~~detector~~ detectors of ~~[[the]]~~ a radiation examining apparatus used in a first examination for irradiating the body ~~in an unbreathed state~~ while the body ceases breathing with ~~second~~ first radiation from ~~[[the]]~~ a radiation source and detecting the same.

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8. (Currently Amended) The tomogram creating method according to any of claims 4 to 7, wherein the functional tomogram creating step has a step for creating data about a first functional tomogram, based on the third radiation ~~[[detect]]~~ signal, and a step for creating data about a second functional tomogram obtained by correcting the first functional tomogram data by the correction information.

9. (Currently Amended) The tomogram creating method according to any of claims 4 to 7, wherein the functional tomogram creating step includes a step for creating voxel information in the body, based on the third radiation ~~detect~~ signal, and a step for creating data about the functional tomogram, based on the voxel information corrected by the correction information.

10-16. (Canceled)